

W. R. McCUTCHEON.

Churn.

No. 57,942.

Patented Sept. 11, 1866.

Fig. 1.

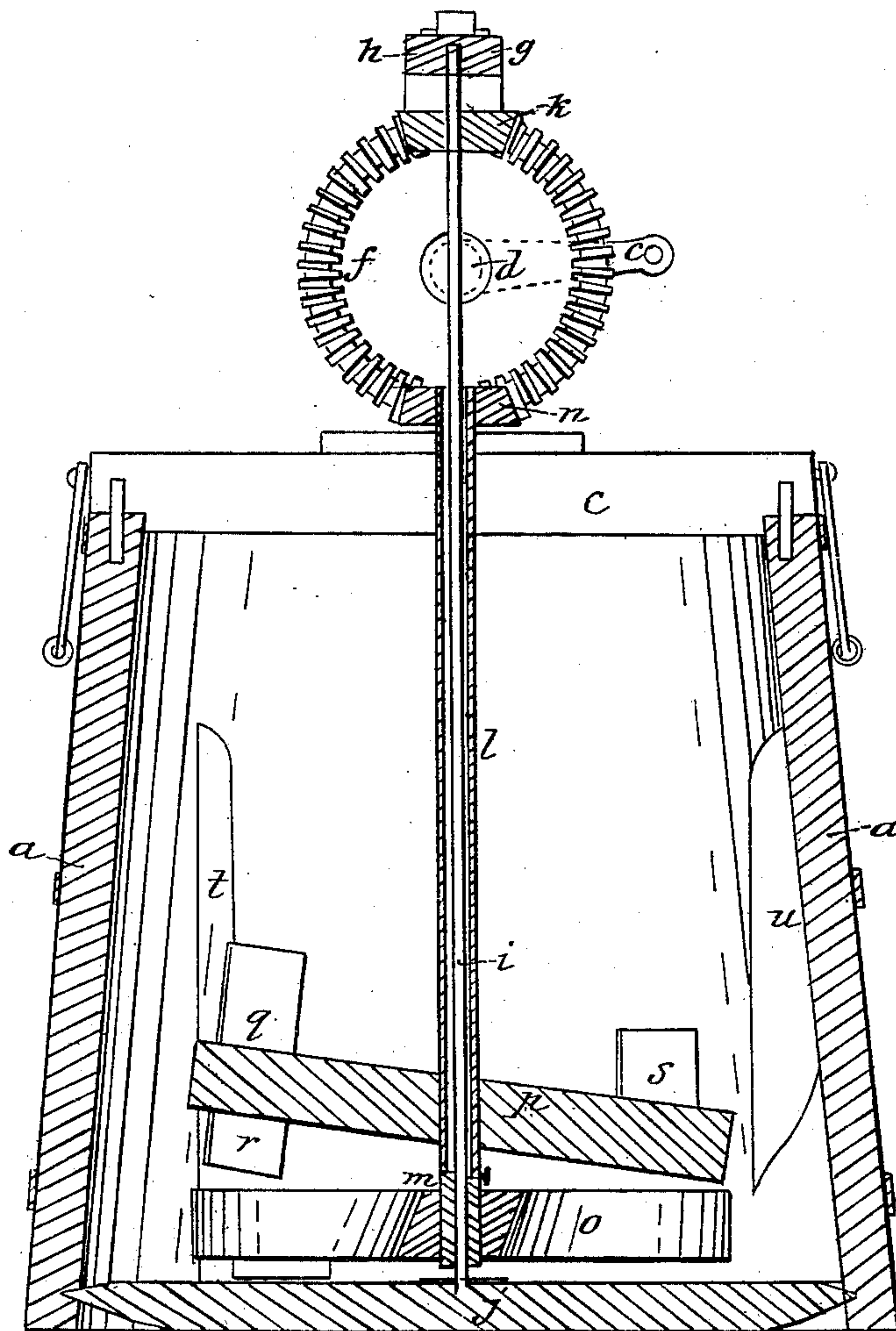
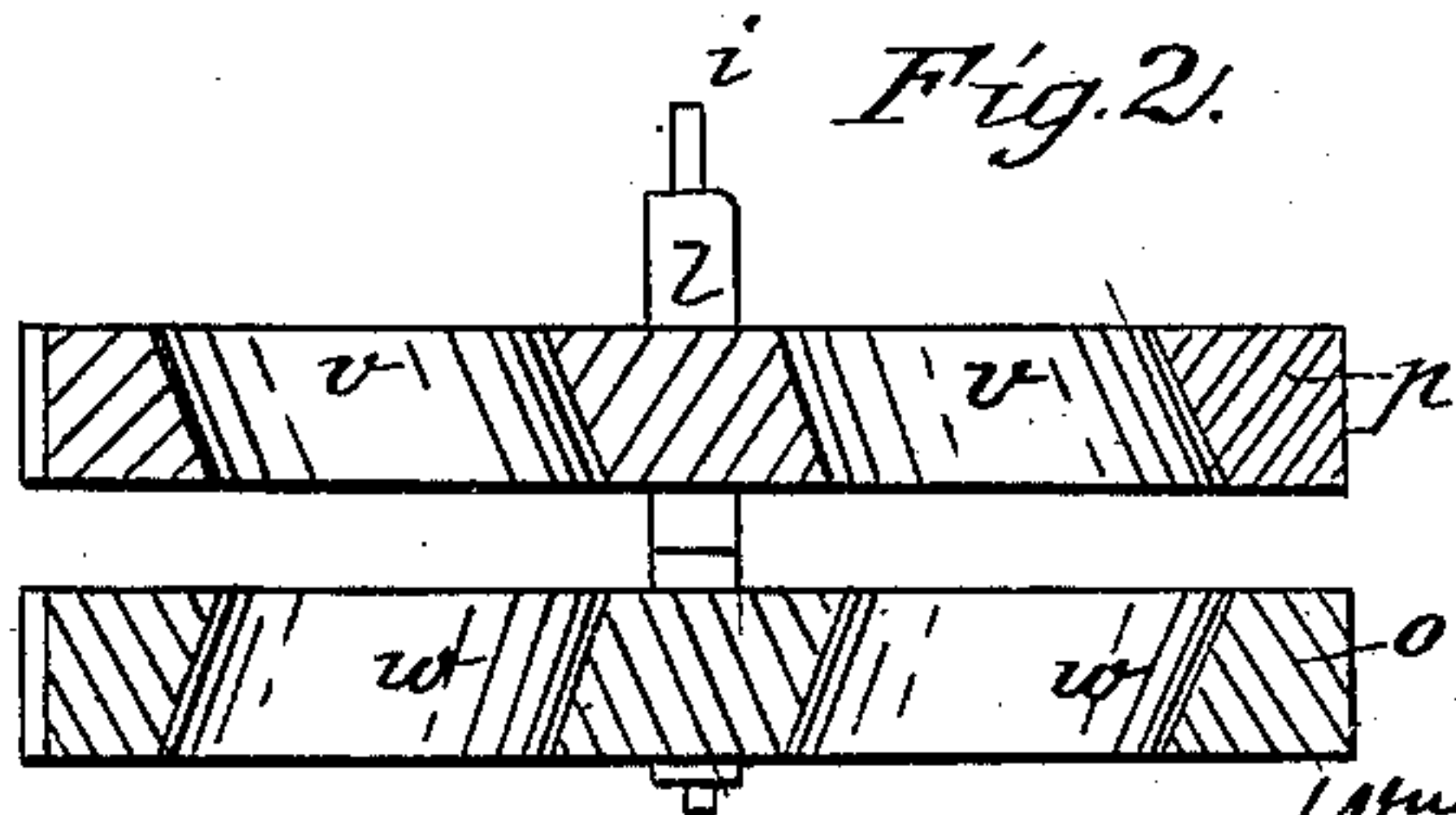


Fig. 2.



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IMPROVEMENT IN CHURNS.

Specification forming part of Letters Patent No. 57,942, dated September 11, 1866.

To all whom it may concern:

Be it known that I, WM. R. McCUTCHEON, of Washington, in the State of Iowa, have invented a certain new and useful Improvement in Churns; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the accompanying drawings, and to the marks and letters thereon, which said drawings form part of this specification, and represent a churn, with my improvement as a part thereof—

Figure 1 being a view by vertical section, and Fig. 2, by like section, being a view of the dashers.

In both of these figures, where like parts are shown, like marks and letters are used to indicate the parts.

The body *a* of the churn is constructed much like many other churns, the top or cover being made of two pieces, *b* and *c*, properly fitted and connected to the churn. Affixed to the piece *c* is a frame-work sustaining the power-shaft *d*, to which is connected the crank or handle *e*. On the inner end of the shaft *d* is a beveled toothed wheel, *f*.

To the upper part of the frame-work is affixed a hinged bar, *g*, in the under surface of which is a bearing, *h*, for the upper end of a solid dasher-shaft, *i*, the lower end of this shaft *i* having a bearing in the bottom *j* of the churn, as represented by Fig. 1.

A beveled toothed wheel or pinion, *k*, on the upper end of the shaft *i*, gears into the beveled wheel *f*. Surrounding the shaft *i* is a tubular shaft, *l*, having its lower bearing on a tube or collar, *m*, secured to the shaft *i*.

A beveled wheel or pinion, *n*, affixed to the upper end of the tubular shaft *l*, gears also into the beveled wheel *f*. On the shaft *i* is a dasher, *a*, and on the shaft *l* is another dasher, *p*. To the dasher *p* are secured projecting pieces *q*, *r*, and *s*. There are, also, projecting pieces *t* and *u* attached to the interior surface of the churn.

The hinged bar *g* may be turned upward, so as to allow of the shafts and dashers being removed from the churn and to admit of the taking off of the wheel *k* from shaft *i*, or of the taking out of the shaft *l* and its dasher, so that either one of the dashers only can be

used independent of the other, or both may be used together. In some instances one dasher only may be all that will be required in churning. When in operation the dashers are moved in opposite directions.

It will be noticed the lower dasher, *o*, is horizontal, while the dasher *p* is affixed to its shaft in an oblique position. This position of the dasher *p* has this advantage over a horizontal dasher, viz., that it will direct the cream and butter downward, thus forcing them into the position most favorable for completing the churning.

The holes or spaces *v w* in the dashers, it will be noticed, have inclined sides running in opposite directions to each other, which inclination of the surfaces of the spaces will facilitate the rapidity of movement of the cream and butter downward.

The rotation of the dashers with the projecting pieces gives to this churn excellent facilities for rapid and effective churning, while the arrangement of the parts will allow of the easy attaching and detaching of the parts, and of the adapting of the churn to the making of lesser or greater quantities of butter, as may be required.

It will be perceived that in Fig. 2 of the drawings the dashers are both placed in the horizontal position, this position being used only the better to show the inclined surfaces of the holes or spaces, and is not intended to represent a position of the dashers, which is regarded as preferable to that shown by Fig. 1.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The arrangement of the shafts and dashers herein set forth, whereby the one or the other dasher may be operated as required.

2. The arrangement of the dasher *p* in the oblique position in relation to the dasher *o*, as herein recited.

3. The arrangement of the spaces or holes *v* and *w* in the dashers, as and for the purposes described.

This specification signed this 19th day of July, 1866.

WM. R. McCUTCHEON.

Witnesses:

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